Special Operations

- ***Given an operational scenario and METOC data, prepare METOC products and present METOC briefings in support of special operations with a minimum of 80% accuracy, according to an evaluation checklist.***

Marine Expeditionary Unit (Special Operations Capable) [MEU(SOC)]

- **An enhancement of individual and unit capabilities and skills required to execute the MAGTF's mission (Minimum capability of all MAGTFs).**
- **Attained through advanced training and addition of specialized equipment.**

Marine Expeditionary Unit (Special Operations Capable)

- ***Includes general purpose expeditionary missions and special operations tasks, requiring rapid planning***
  - Amphibious raids
  - Noncombatant Evacuation Operations (NEO)
  - Mobile Training Teams (MTT), Mobile Riverine Forces (MRF)
  - Signal Intelligence/Electronic Warfare Operations (SIGINT)

Marine Expeditionary Unit (Special Operations Capable)

- Tactical Recovery of Aircraft, Equipment, Personnel (TRAP)
- Military Operations in Urban Terrain (MOUT)
- In Extremis Hostage Recovery (IHR)
- Maritime Interdiction Operations (MIO)
- Gas and Oil Platform (GOPLAT) Operations

Marine Expeditionary Unit (Special Operations Capable)

- ***Capabilities***
  - Move forces into crisis areas without revealing their exact destination or intention
  - Just over the horizon potential
  - Project a measured degree of combat power ashore.
  - Operate independently of established airfields, basing agreement, and overflight rights.
  - Secure staging areas for follow-on troops.

Marine Expeditionary Unit (Special Operations Capable)

- Withdraw rapidly at the conclusion of operations
- Enter and exit at night
- Operate under adverse weather conditions
- Can be deployed by a variety different of means
  - *Amphibious or commercial ships*
  - *Tactical or strategic airlift*
  - *Organic Marine Corps aviation*

METOC support vision

- ***The METOC support system must ensure that all SO's receive accurate METOC information at each echelon of command at the right time and in the right format to effectively support the planning and execution phases of operation during peace and war.***
- ***METOC incorporates all facets of weather services', from the bottom of the ocean to the surface of the sun.***

METOC support vision

- ***Special Operations planners must be aware of METOC factors that will affect the operation and threshold values for:***
  - The effective use of weapon systems and tactics
  - To provide maximum safety of SO personnel

METOC support vision

- ***Policy: METOC critical threshold values are those which significantly reduce effectiveness of, to prevent the execution of tactical operations, or weapons systems.***
  - Values that define operational limits beyond which isn't feasible to operate because of safety considerations or decreasing effectiveness: used for general planning minimums
  - Based on tests conducted during development and through experience

METOC support vision

- Variable condition (above and Below) critical value can prevent the accomplishment of SO missions
- Can identify additional METOC parameters which may affect operations and should be considered

METOC support vision

- ***Threshold values set by operational SO commanders***
  - Have responsibilities and experience
  - Must weigh safety and efficiency factors of SO mission- mission critical values

METOC support vision

- ***METOC Personnel Responsibilities***
  - Know the Mission of the SO
    - *Must be qualified (forecasters)*
    - *Help commanders determine GO/NO GO decisions*

METOC support vision

- Planning
  - *SO capabilities (equipment to be used)*
  - *Which elements "will" or "might" have an impact on the mission*
  - *Provide Climatological, Forecast and Observations to aid in the decision making*

METOC support vision

- Mission Training
  - *Weaponry systems operators will use METOC values to familiarize themselves with factors which may affect their mission (See USSOCOM MANUAL Number 525-6, and FM 34-81-1 for critical values)*
  - *METOC personnel will use threshold values to familiarize themselves with meteorological and oceanographic elements which require close examination while preparing a forecast.*

METOC support vision

- ***METOC Mission - To provide or arrange joint meteorological and oceanographic support to SO's worldwide. Various METOC echelons are charged with specific mission/functions tailored to satisfy the requirements of the Commands they support.***

METOC support vision

- Maintains the ability to function independently as a tactical forecast unit for the supported unit for any area of operations providing:
  - *24-hour forecasting support to all unit operations and missions*
  - *Area of operations weather data collection*
  - *Customized support products generated at higher echelons*
  - *Provides and ensures coordination of weather warnings, advisories, and watches for the units*

METOC support vision

- *Provides routine weather observing and forecasting to support the terminal areas, and limited direct forecasting and observing support to smaller forward operating bases (FOBs) and FARPs (Forward Arming and Refueling Points) as required by the unit commander to enhance key small-scale operations*

METOC support vision

- Provides the mission weather support:
  - *Develops and briefs mission planning climatological products*
  - *Develops and briefs mission execution forecasts to operational elements*
  - *Provides operational weather support during the element's deployment*
  - *Participates in pre/post deployments briefs and debriefs*

METOC support vision

- Maintains weather support capabilities for mission-specific requirements:
  - *Conducts site surveys to evaluate host nation weather support capabilities*
  - *Organizes, trains, establishes, and maintains indigenous weather observation networks using standardized procedures*
  - *Provides a liaison weather support team to attach to the unit participating in collateral activity to coordinate with local, indigenous, and host nation weather services to provide necessary weather forecast / observing support*

METOC support vision

- *Provides electro-optical support as required to include*
  - *Target*
  - *Infiltration/exfiltration*
  - *Hide site area*
  - *Enroute conditions*
- *Maintains and collects upper air date collection capability to support drops*

Special Operations

- ***Secondary or supporting operations which may be adjunct to various other operations and for which no one service is assigned responsibility. These operations are limited in scope and have specific missions not covered by the unconventional or conventional forces, indigenous paramilitary forces, or any mixture of these forces.***

Special Operations

- ***Raid - An operation, usually small scale, involving a swift penetration of hostile territory to secure information, confuse the enemy, or to destroy his installations. It ends with a planned withdrawal upon completion of the assigned mission***

Special Operations

- Conducted as a separate operation in support of other operations.
  - *Psychological*
  - *Destruction*
  - *Harassment*
  - *Combat information*
  - *Evacuation and recovery*
  - *Diversion*

Special Operations

- Considerations - ability of friendly/enemy to detect , move, and advantages; all relevant factors for the objective area, sea operating areas, and routes to and from the areas.

Special Operations

- ***Mobile Riverine Forces (MRF) - Considered a joint task force, even though Navy and Marine Corps OPS do not require the formation of a joint task force.***
  - Riverine operations are conducted in a Riverine area to achieve and/or maintain control of a waterway system and its adjoining land areas, or to deny their use to the enemy.
  - Weather , Hydrography , and Terrain take more importance than other types of Operations - may be the controlling factor

Special Operations

- Environmental factors can affect the composition and employment of the MRF
- Riverine operations may include:
  - *Intelligence collection*
  - *Planning*
  - *Embarkation of troops and equipment*
  - *Patrol/barrier and interdiction and surveillance operations*
  - *Riverine assault operations*
  - *Naval Riverine close fire support*

Special Operations

- *Close air support*
- *Naval gunfire and firebase support*
- *Repositioning of forces*
- *Re-supply of the Riverine force until termination of the campaign*
- *PSYOP(Psychological OPS) / civic action programs*
- *Re-embarkation / withdrawal*
- *May also include heli-borne operations*

Special Operations

- ***Characteristic influences on cold weather operations (Arctic or Northern operations) - Chosin Reservoir 1950***
  - Snow cover - Movement, concealment, supporting fires
  - Ice cover (rivers, lakes)
  - Extreme Cold (weapons/personnel)
  - Rapid weather pattern changes

Special Operations

- ***Characteristic influences on desert operations - Desert Storm/Shield***
  - Extreme temperatures
  - Bright sunshine/moonshine
  - Dust storms

Special Operations

- ***Mountain Operations- Major characteristics that may influence mountain OPS***
  - Pressure
  - Winds
  - Precipitation

Special Operations

- ***Insertion and Extraction (Helicopter) - The Marine Corps uses a combination of different techniques when a suitable landing zone cannot be found, to include:***
  - SPIE (Special Patrol Insertion/Extraction)- Designed for both insertion and extraction of ground personnel by helicopter from inaccessible terrain

Special Operations

- Fast Roping- A means of descending from a helicopter by sliding down a braided rope gripped between the hands, thighs, and feet (without friction devices).
- Rappelling- A means of descending down a rope passed through or across a friction device, which slows the descent.
- Jacob’s Ladder- Designed for use in emergency extraction where helicopters could not land.

Special Operations

- ***METOC Requirements for Special Operations Briefs (Requirements may/will change with individual mission type)***
  - Sky Cover (to include Fog Banks)
    - *Amount*
    - *Type*
    - *Height (Bases and Tops)*
  - Visibility (Surface/Aloft)

Special Operations

- Temperatures (Air/Water)
  - *Maximum*
  - *Minimum*
  - *Wind Chill*
  - *Heat index (heat stress)*
  - *Exposure*
- Winds (Surface and Aloft)
  - *Direction (Changes)*
  - *Speed (kts/mph)*

Special Operations

- Pressure
- Precipitation (Type, Amount, Intensity)
- Storm Phenomena
- Solar and Lunar data

Special Operations

- Hydrographic data
  - *Tides*
  - *Sea states / Surf Conditions*
  - *Sea temperatures (exposure limits)*
  - *Current at sea*
  - *Surf*
  - *Beach orientation, current and direction*
  - *Sea/River Depths & Clarity (10 ft.)*

Special Operations

- METOC Critical Values
  - *Commander sets criteria*
  - *Standard values*
  - *SOC manual number 525-6*
  - *FM 34-81-1*
  - *NWP 3-05.11 (requirements)*

- **APPLICATION: Assign Special Operations scenario's**
- **EVALUATION: Progress check at the end of the unit**